CLAIMS

1.   A recording and reproducing apparatus comprising a
reading means that reads content including AV data or application
programs/data; a recording means that records the read content;
and a processing means that reproduces or executes the recorded
content, wherein the processing means adds different access
constraints to any content that can be reproduced or executed
by the recording and reproducing apparatus depending on the
process of the content.

2.   The recording and reproducing apparatus of claim 1,
comprising an external interface to connect an external
recording medium recording the content or to connect a server
recording the content via network, wherein the processing means
has an installation processing means that installs the content
recorded in the external recording medium or the server connected
with the external interface into a certain area of the recording
means.

3.   The recording and reproducing apparatus of claim 2,
wherein the installation processing means permits only the
content allowed to be installed in the external recording medium
or the server connected with the external interface to be
installed into the certain area of the recording means.

4.   The recording and reproducing apparatus of claim 2, wherein the processing means instructs the installation processing means to install based on an installation instruction from the content reproduced or executed by the recording and reproducing apparatus and wherein the writing process to the certain area cannot be executed by other than the installation processing means.

5.   The recording and reproducing apparatus of any one of claims 2 to 4, wherein when the recording and reproducing apparatus reproduces or executes any content, the processing means makes the content unable to access other or all contents recorded in the external recording medium.

6.   The recording and reproducing apparatus of any one of claims 2 to 4, wherein when the recording and reproducing apparatus reproduces or executes any content, the processing means makes the content unable to access other or all contents installed in the recording means.

7.   The recording and reproducing apparatus of any one of claims 2 to 4, comprising a memory that is an execution area of the content, wherein the processing means has a load processing means that loads the executable content recorded

in the recording means, the external recording medium, or the server into the memory.

8.   The recording and reproducing apparatus of claim 7, wherein the processing means instructs the load processing means to load based on a load instruction from the content reproduced or executed by the recording and reproducing apparatus and wherein the load process cannot be executed by other than the load processing means.

9.   The recording and reproducing apparatus of claim 7 or 8, wherein when the recording and reproducing apparatus reproduces or executes any content, the processing means makes the content unable to access other or all contents loaded in the memory.

10.   The recording and reproducing apparatus of claim 7 or 8, wherein the recording means has programs and data necessary for reproducing or executing the content that are regarded as one package and recorded on a package-by-package basis, wherein the load processing means loads at least all or some of the programs constituting an any package recorded in the recording means into the memory, and wherein when reproducing or executing all or some of the programs constituting the package that are loaded into the memory, the processing means makes the reproduced

or executed programs unable to access packages other than the package including the programs.

11.   The recording and reproducing apparatus of claim 7 or 8, wherein when the recording and reproducing apparatus reproduces or executes any content, the processing means completely prohibits the reproduced or executed content from accessing the recording means, the external recording medium, the server, and the memory.

12.   The recording and reproducing apparatus of any one of claims 1 to 11, wherein when the recording and reproducing apparatus reproduces or executes any content, the processing means constrains the access of the content depending on the reliability of the content.

13.   The recording and reproducing apparatus of claim 12, wherein the reliability of the content is set based on any one or more of a description language of the program, a recording medium that is a read source of the content read by the reading means, and a network address that is a read source of the content read by the reading means.

14.   A file accessing method for accessing content configuration files with the use of a recording and reproducing

apparatus comprising a reading means that reads content including AV data or application programs/data, a recording means that records the read content, and a processing means that reproduces or executes the recorded content, wherein different access constraints are added to any content that can be reproduced or executed by the recording and reproducing apparatus depending on the process of the content.

15.   The file accessing method of claim 14, wherein the content recorded in the external recording medium or the server is read and wherein the read content is installed into a certain area of the recording means.

16.   The file accessing method of claim 15, wherein only the content allowed to be installed in the external recording medium or the server is allowed to be installed into the certain area of the recording means.

17.   The file accessing method of claim 15, wherein an installation processing means provided in the processing means is instructed to install based on an installation instruction from the content reproduced or executed by the recording and reproducing apparatus and wherein the writing process to the certain area of the recording means cannot be executed by other than the installation processing means.

18. The file accessing method of any one of claims 15 to 17, wherein when the recording and reproducing apparatus reproduces or executes any content, the content is made unable to access other or all contents recorded in the external recording medium.

19. The file accessing method of any one of claims 15 to 17, wherein when the recording and reproducing apparatus reproduces or executes any content, the content is made unable to access other or all contents installed in the recording means.

20. The file accessing method of any one of claims 15 to 17, wherein the executable content recorded in the recording means, the external recording medium, or the server is loaded into a memory provided in the recording and reproducing apparatus.

21. The file accessing method of claim 20, wherein a load processing means provided in the processing means is instructed to load based on a load instruction from the content reproduced or executed by the recording and reproducing apparatus and wherein the load process cannot be executed by other than the load processing means.

22.   The file accessing method of claim 20 or 21, wherein when the recording and reproducing apparatus reproduces or executes any content, the content is made unable to access other or all contents loaded in the memory.

23.   The file accessing method of claim 20 or 21, wherein the recording means has programs and data necessary for reproducing or executing the content that are regarded as one package and recorded on a package-by-package basis, wherein at least all or some of the programs constituting an any package recorded in the recording means are loaded into the memory, and wherein when reproducing or executing all or some of the loaded programs constituting the package, the reproduced or executed programs are made unable to access packages other than the package including the programs.

24.   The file accessing method of claim 20 or 21, wherein when the recording and reproducing apparatus reproduces or executes any content, the content is completely prohibited from accessing the recording means, the external recording medium, the server, and the memory.

25.   The file accessing method of any one of claims 14 to 24, wherein when the recording and reproducing apparatus reproduces or executes any content, the access of the content

is constrained depending on the reliability of the content.

26.   The file accessing method of claims 25, wherein the reliability of the content is set based on any one or more of a description language of the program, a recording medium that is a read source of the content read by the reading means, and a network address that is a read source of the content read by the reading means.

27.   An AV data managing method for managing AV data reproduction process with the use of management information of the AV data, the method comprising an associated AV data/management information acquiring step of acquiring a plurality of associated AV data associated with AV data recorded in a recording medium as well as management information of the AV data that has associated management information added for managing the reproduction process of the associated AV data; a recording step of recording the obtained plurality of the associated AV data and the management information of the AV data into a certain recording area; and a reproduction controlling step of concurrently reproducing and controlling the AV data recorded in the recording medium and the associated AV data recorded in the recording area in accordance with the recorded management information.

28.   The AV data managing method of claim 27, wherein as a result of retrieving the AV data management information that can be obtained at the associated AV data/management information acquiring step and the AV data management information already recorded at the recording step, it is determined that the management information with the largest number of pieces of the added associated management information is the latest, and wherein at the reproduction controlling step, the AV data and the associated AV data are concurrently reproduced and controlled with the use of the determined latest management information.

29.   The AV data managing method of claim 27 or 28, comprising a determining step of determining whether or not the associated AV data corresponding to each piece of the associated management information included in the AV data management information recorded at the recording step are recorded in a certain recording area, wherein if the associated AV data are not recorded in the recording area as a result, the associated management information corresponding to the associated AV data is disabled.

30.   The AV data managing method of claim 29, comprising a deleting step of selectively deleting only the associated AV data recorded in the recording area out of the associated

AV data that are managed by the AV data management information obtained at the associated AV data/management information acquiring step.

31.   An AV data management information producing/providing method wherein when associated AV data associated with AV data recorded in a recording medium are produced, management information of the AV data having associated management information added correspondingly to the associated AV data is produced to enable the produced associated AV data and the AV data management information to be provided.

32.   A recording and reproducing apparatus having an external device interface that reads AV data recorded in the recording medium and a network interface that connects with a server that records a plurality of associated AV data associated with the AV data recorded in the recording medium, wherein the recording and reproducing apparatus comprises a downloading means that downloads the plurality of the associated AV data as well as management information of the AV data that has associated management information added for managing the reproduction process of the associated AV data from the server into a certain recording area; and a reproduction controlling means that concurrently reproduces and controls the AV data recorded in the recording medium and the downloaded associated

AV data in accordance with the downloaded management information.

33.   The recording and reproducing apparatus of claim 32, wherein as a result of retrieving the AV data management information recorded in the server and the AV data management information already recorded in the recording area, it is determined that the management information with the largest number of pieces of the added associated management information is the latest, and wherein the reproduction controlling means concurrently reproduces and controls the AV data and the associated AV data with the use of the determined latest management information.

34.   The recording and reproducing apparatus of claim 32 or 33, comprising a determining means that determines whether or not the associated AV data corresponding to each piece of the associated management information included in the AV data management information downloaded by the downloading means are downloaded into the recording area, wherein if the associated AV data are not downloaded into the recording area as a result, the associated management information corresponding to the associated AV data is disabled.

35.   The recording and reproducing apparatus of claim 34,

comprising a deleting means that selectively deletes only the associated AV data downloaded into the recording area out of the associated AV data that are managed by the AV data management information downloaded by the downloading means.

36.   A server that can be connected to the recording and reproducing apparatus of any one of claims 32 to 35, wherein when associated AV data associated with AV data recorded in a recording medium are produced, management information of the AV data having associated management information added correspondingly to the associated AV data is produced to enable the produced associated AV data and the AV data management information to be provided.